U.S. Environmental Protection Agency
Environmental Technology Verification (ETV) Program Open House
October 13, 2009

Andrew W. Breidenbach Environmental Research Center (AWBERC), Auditorium
26 West Martin Luther King Drive, Cincinnati, OH 45268

Tuesday, October 13, 2009		
10:00 a.m. – 11:15 a.m.	ETV Team Training (conference rooms 130/138)	
11:15 a.m.	LUNCH	
ETV Open House – AWBERC Auditorium		
12:30 p.m.	Welcome and ETV Introduction	Teresa Harten, EPA
12:35 p.m.	ETV Advanced Monitoring Systems Center – Air, Water, and Land/Waste Topics: Leak detection for fugitive emissions Airborne leak detection for natural gas pipelines Microcystins test kits Nitrate sensors for in-situ groundwater monitoring Coliforms in drinking water Radio frequency identification devices for hazardous waste package tracking Vapor intrusion Leak detection for underground storage tanks	Amy Dindal, Battelle John McKernan, EPA
1:25 p.m.	ETV Air Pollution Control Technology Center Topics: Mobile sources devices Mobile sources selective catalytic reduction (SCR) Outdoor wood-fired hydronic heaters	Jenia Tufts, RTI International Mike Kosusko, EPA
1:55 p.m.	ETV Greenhouse Gas Technology Center Topics: Combined heat and power Microturbines Waste-to-energy Gasification to biofuels	Tim Hansen, Southern Research Institute Lee Beck, EPA

2:25 p.m.	ETV Drinking Water Systems Center Topics: Membrane/sorption and ultraviolet technologies for surface/ground water microbiological contamination (LT2-SWTR) Emergency mobile package or POE/POU treatment technologies	Bruce Bartley, NSF International Jeff Adams, EPA
2:55 p.m.	BREAK	
3:10 p.m.	ETV Water Quality Protection Center Topics: Wastewater treatment Stormwater treatment Infrastructure rehabilitation Ballast water treatment	Tom Stevens, NSF International Ray Frederick, EPA
3:40 p.m.	ETV Materials Management and Remediation Center Topics: In-situ chemical oxidation Fracturing Reactive capping Sediment remediation Sediment beneficial reuse Anti-corrosion sprays Electronics recycling Tire recycling Concrete reuse Coal ash reuse	Amy Dindal, Battelle Teri Richardson, EPA
Environmental and Sustainable Technology Evaluations		
4:10 p.m.	Microbial-Resistant Building Materials	Bob Wright, EPA
4:20 p.m.	Pesticide Drift Reduction Technologies	Mike Kosusko, EPA
4:30 p.m.	Performance Characteristics of Qualitative Spot Test Kits for Lead in Paint	Julius Enriquez, EPA
4:40 p.m.	Anaerobic Digestion of Animal Manure	Wendy Davis-Hoover, EPA
4:50 p.m.	Assessment and Rehabilitation of Drinking Water Distribution and Wastewater Collection Systems	Ray Frederick, EPA
5:00 p.m.	Questions/Answers	
5:15 p.m.	ADJOURN	
Wednesday, October 14, 2009 – Conference Rooms 130/138		
8:30 a.m. – 4:15 p.m.	ETV Team Training (conference rooms 130/138)	

ETV Verification Centers
www.epa.gov/nrmrl/std/etv/verifications.html

ETV Advanced Monitoring Systems (AMS) Center
The ETV AMS Center is operated in cooperation with Battelle. This center verifies the performance of commercial-ready technologies that monitor contaminants and natural species in air, water, and soil. The center tests both field-portable and stationary monitors, as well as innovative technologies that can be used to describe the environment (site characterization). This center is also part of the Environmental Technology, Assessment, Verification and Outcomes Staff; EPA Office of Research and Development (ORD) National Risk Management Research Laboratory (NRMRL). For more information, visit http://www.epa.gov/nrmrl/std/etv/center-ams.html.

ETV Air Pollution Control Technology (APCT) Center
The ETV APCT Center is operated in cooperation with RTI International. This center verifies the performance of commercial-ready technologies that control stationary and mobile air pollution sources, and mitigate the effects of indoor air pollutants. This center is also part of the Air Pollution Prevention and Control Division, EPA ORD NRMRL. For more information, visit http://www.epa.gov/nrmrl/std/etv/center-apc.html.

ETV Greenhouse Gas Technology (GHG) Center
The ETV GHG Center is operated in cooperation with Southern Research Institute. This center verifies the performance of commercial-ready technologies that produce, mitigate, monitor, or sequester greenhouse gas emissions. This center is also part of the Air Pollution Prevention and Control Division, EPA ORD NRMRL. For more information, visit http://www.epa.gov/nrmrl/std/etv/center-ggt.html.

ETV Drinking Water Systems (DWS) Center
The ETV DWS Center is operated in cooperation with NSF International. This center verifies the performance of commercial-ready drinking water treatment systems for use in small communities, or individual homes and businesses. The emphasis is on performance and cost considerations of systems for treating common small community problems, such as arsenic, microbiological contaminants, particulates, and disinfection by-products. This center is also part of the Water Supply and Water Resources Research Division, EPA ORD NRMRL. For more information, visit http://www.epa.gov/nrmrl/std/etv/center-dws.html.

ETV Water Quality Protection (WQP) Center
The ETV WQP Center is operated in cooperation with NSF International. This center verifies the performance of commercial-ready technologies that protect groundwater and surface waters from contamination. Technologies in this center typically fall under two main areas: source water protection—technologies that prevent the contamination and maintain the quality of drinking water supplies from both groundwater and surface water sources; and wet weather flow—technologies that control and treat the increased volumes of water as runoff, in sewers, and in wastewater treatment plants during periods of wet weather events. This center is also part of the Water Supply and Water Resources Research Division, EPA ORD NRMRL. For more information, visit http://www.epa.gov/nrmrl/std/etv/center-wqp.html.

ETV Materials Management and Remediation (MMR) Center

The ETV MMR Center is operated in cooperation with Battelle. This center verifies the performance of materials management technologies, including for recycling, beneficial use of waste materials, recovery of useful components of waste, and treatment to minimize disposal requirements (e.g., containment, volume, cost, etc.); and technologies to remediate contaminated land and groundwater, such as that found at Superfund sites and other properties where industrial or commercial activities have resulted in a legacy of hazardous constituents that limit future use of the property. This center is also part of the Land Remediation and Pollution Control Division, EPA ORD NRMRL. For more information, visit http://www.epa.gov/nrmrl/std/etv/center-mmr.html.

ETV Environmental and Sustainable Technology Evaluations (ESTE)
www.epa.gov/nrmrl/std/etv/este.html

Microbial-Resistant Building Materials

Under this project, ETV has developed a testing protocol and is using it to verify the performance of mold resistant building products, such as microbial resistant flooring, duct liners, and insulation materials. This project is evaluating building products for: ability to support fungal (mold) growth, resistance to moisture uptake, volatile organic compounds emissions, and related sustainability criteria. For more information, visit http://www.epa.gov/nrmrl/std/etv/este.html#mrbmgw.

Pesticide Drift Reduction Technologies

Under this project, ETV, in collaboration with EPA's Office of Pesticide Programs, is developing and validating a testing protocol to verify the potential effectiveness of technologies for reducing off-target spray drift from pesticide applications. These technologies may include improved sprayer designs, low drift nozzles, and drift retardant chemicals. For more information, visit http://www.epa.gov/nrmrl/std/etv/este.html#pdrt.

Performance Characteristics of Qualitative Spot Test Kits for Lead in Paint

Under this project, ETV, in collaboration with EPA's Office of Pollution Prevention and Toxics, is verifying lead test kits. The EPA Lead; Renovation, Repair, and Painting Program rule identifies the ETV Program for obtaining independent laboratory validation of test kit performance. ETV will verify test kits based on the criteria established for the second phase evaluation process (5% false negative and 10% false positive standards) in the rule. For more information, visit http://www.epa.gov/nrmrl/std/etv/este.html#pdrt.

Anaerobic Digestion of Animal Manure

Under this project, ETV, in collaboration with EPA's Office of Water, is verifying an anaerobic digester in use at a large scale confined animal feeding operation. The test is evaluating several reactor performance parameters and measuring reduction of organic solids, methane generation, energy generation, and reduction of potentially pathogenic organisms. For more information, visit http://www.epa.gov/nrmrl/std/etv/este.html#adam.

Assessment and Rehabilitation of Drinking Water Distribution and Wastewater Collection Systems

Under this new project, ETV is verifying the performance of technologies for assessment and rehabilitation of water infrastructure, including drinking water distribution and wastewater collection systems. This project is currently testing chemical grouting materials at the University of Houston, Center for Innovative Grouting Materials and Technology.